

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1 and 3-5 are pending. By this amendment Claims 2 and 6-10 are canceled, Claims 1, 3, 4 and 5 are amended and the specification is amended to correct informalities. No new matter has been added.

The Office Action objects to the specification and claims. The specification and claims are amended to obviate these objections.

The Office Action rejects Claims 2, 6 and 8 under 35 U.S.C. § 112, second paragraph. Claims 2, 6 and 8 have been canceled rendering this rejection moot.

The Office Action rejects Claims 1, 2 and 4 under 35 U.S.C. § 103(a) over JP 06-198685 (JP ‘685) in view of U.S. Patent 5,552,098 to Kudo et al., Claims 3 and 5-8 under 35 U.S.C. § 103(a) over JP ‘685 in view of Kudo et al. and further in view of JP 07-068605 (JP ‘605) and Claims 9 and 10 under 35 U.S.C. § 103(a) over JP ‘685 and Kudo et al. and further in view of JP 04-195743 (JP ‘743). These rejections are respectfully traversed.

Before considering the rejections under 35 U.S.C. § 103, it is believed that a brief review of the subject matter of independent Claim 1 would be helpful. Independent Claim 1 includes a mold apparatus for injection molding a disk substrate. The mold apparatus includes a cavity into which a molten resin is injected through a sprue bushing and a gate. A signal transfer stamper is disposed on a fixed die side of the cavity. The sprue bushing is disposed on the fixed die side and a gate cutter is disposed on a movable die side. A projected portion is formed at a tip of the sprue bushing and a center hole molding portion is provided at an outer circumference of the sprue bushing. A recessed portion is formed at a tip of the gate cutter opposite to the projection portion of the sprue bushing and the gate

cutter whose tip is recessed in shape is advanced from a movable die side to perform gate cutting.

Neither JP '685 nor Kudo disclose a sprue bushing having a projected portion formed at a tip and a gate cutter having a recessed portion formed at a tip opposite to the projection portion of the sprue bushing, as in amended independent Claim 1. Instead, JP '685 discloses a sprue bushing 23 having a recessed tip. See Figures 3, 6 and 9. Kudo discloses a sprue bushing 48 having a recessed tip and a punch having no recess. See Figure 7. JP '605 and JP '743 do not provide the deficiencies of JP '685 and Kudo.

As shown in Figures 22-24 of the specification, a related art mold apparatus of a fixed side stamper type includes a sprue bushing whose tip is recessed in shape and a gate cutter whose tip is projected in shape. In this case, flash 75 in the shape of a projection to the outside from the edge of the signal transfer surface 72 side of the center hole 74 is formed. The disk substrate 73 with the flash generated on the side of the reference surface which is the same side as the signal transfer side 72, as shown in Figure 25, cannot be centered with high accuracy. In the related art optical disk drive device, such as CD or DVD, a laser beam is incident from the reference surface opposite to the signal transfer surface where writing and reading of information are conducted. However as discussed in the specification at page 12, line 11 et seq., Claim 1 relates to an optical disk drive device in which a laser beam is incident from the side of the signal transfer surface.

The dependent claims are allowable for at least the reasons discussed above with respect to independent Claim 1 as well as for the individual features they recite. Withdrawal of the rejections of the dependent claims is respectfully requested.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Michael Britton
Registration No. 47,260

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

I:\ATTY\MB\244155US-AM.DOC